2004 – 2005

Saskatchewan
Provincial Budget

Performance Plan

104-05169/

Minister's Message

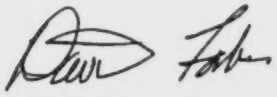
It is my pleasure to present the performance plan for the Saskatchewan Watershed Authority for 2004-05 and beyond.

Water, one of our most precious natural resources, is essential to sustain human life. Saskatchewan's watersheds and aquifers are the source of our water for drinking and other domestic uses. These source waters support agriculture as well as other industries and are an important resource for future economic development. Saskatchewan's lakes and rivers are essential components of our ecosystems and provide recreational opportunities to our citizens as well as to visitors from around the world.

The Saskatchewan Watershed Authority was created as part of Saskatchewan's Safe Drinking Water Strategy, and given the responsibility of protecting and managing this vital resource. This performance plan, the Authority's first, is the product of an intense and visionary strategic planning process. Our plan is focused on advancing effective water management and stewardship in Saskatchewan, to ensure safe and secure water supplies for our citizens.

Many of the key activities and initiatives are already well underway, including the implementation of a new watershed planning model, development of effective watershed monitoring and assessment protocols, and a long-term initiative to strengthen and renew our water management infrastructure such as dams, weirs and conveyance channels. By the end of 2004, the Authority will release a plan for water conservation in Saskatchewan. I am committed to completing the key actions identified in our performance plan and reporting on the Authority's progress to the people of Saskatchewan, in July 2005.

The responsible stewardship of our water is a responsibility shared by all. The Saskatchewan Watershed Authority is committed to working with all Saskatchewan citizens, with residential, agricultural, industrial and recreational users, with aboriginal interests, local governments and stewardship groups to manage, protect and restore our Province's source waters, now and in the future.



David Forbes
Minister Responsible for the Saskatchewan Watershed Authority

Who We Are

In October 2002, as a result of Saskatchewan's Safe Drinking Water Strategy, the Saskatchewan Watershed Authority was formed with a mandate to manage and protect water quantity and source water quality in Saskatchewan while taking into consideration the need for conservation. The newly formed Authority amalgamated staff from SaskWater, Saskatchewan Environment and the Saskatchewan Wetland Conservation Corporation. The Authority's vision is *"Excellence in Watershed Management Promoting Safe, Sustainable Water Supplies in Healthy Ecosystems."*

The Saskatchewan Watershed Authority currently has 189 employees. The Authority's head office is located in Moose Jaw, but many services and programs are delivered through its regions and other offices located in Nipawin, North Battleford, Prince Albert, Regina, Saskatoon, Swift Current, Weyburn and Yorkton.

To manage surface water supplies, the Authority owns and operates the Province's water management infrastructure of 45 dams and 130 kilometres of conveyance channels plus ancillary works. These include Gardiner, Qu'Appelle, Rafferty and Alameda dams. The Authority makes significant investments in rehabilitation and upgrading of this infrastructure each year. The Authority provides hydrology expertise to determine water supplies, guide allocations, and predict floods. All major water allocations including municipal, industrial, irrigation, and intensive livestock uses must be approved by the Authority. Authority staff also represent Saskatchewan on trans-boundary water issues.

Much of Saskatchewan depends on groundwater. To protect this resource, the Authority licenses all but domestic users to ensure new development does not impact existing users, conducts studies to determine groundwater supplies and provides information to citizens and industry to help locate groundwater supplies.

The Authority's water control program supports agriculture by helping to maintain the productivity of flood prone land and by addressing water erosion issues. The Authority also hears formal complaints about drainage causing damage and may rule and enforce remedies, such as ditch blocks.

Watershed and aquifer planning has been initiated in seven areas to protect source water. The Authority's stewardship and extension programs assist landowners to improve watershed health through restoration of riparian areas, wetland and grassland protection, and encouragement of management practices which assist fish and wildlife and protect water sources.

Assessing the health of the watersheds is an essential aspect of source water protection. The Authority is currently developing a plan for State of Watershed Reporting.

Public support and participation is essential to efforts to protect source water. The Authority therefore works with partners in the Safe Drinking Water Strategy to deliver education and information programs to create awareness and understanding of water and watershed issues.

To assist the Authority in achieving its goals and objectives, an Advisory Committee, representative of stakeholder and interest groups throughout the Province, brings wide-ranging expertise on source water issues. The committee convenes about three times per year to identify and evaluate a broad range of water issues, challenges and opportunities and provides this information and advice to the Saskatchewan Watershed Authority.

Plan at a Glance

The Saskatchewan Watershed Authority is a new organization, created in October 2002. This is a summary of our first published performance plan, covering the 2004-05 fiscal year and beyond. The goals and objectives stated are long-term in nature which the Authority will work toward over a number of years. The plan also states the key actions the Authority will undertake in the 2004-05 year to work toward its objectives and will report on in our annual report. A good plan must evolve as circumstances change. The Authority will review its goals and objectives annually, develop new key actions and work to develop a more complete set of performance measures.

Vision – Excellence in watershed management promoting safe, sustainable water supplies in healthy ecosystems

GOAL #1

Safe and sustainable water supply

OBJECTIVE 1 *- Water management infrastructure is safe and meets operational requirements*

Performance Measures:

- Risk ratio for the Province's water management infrastructure
- Number of dams requiring significant upgrades to meet dam safety standards

OBJECTIVE 2 *- Water supply is reliable*

Performance Measures:

- Under development

OBJECTIVE 3 - *Flood damage is minimized*

Performance Measure:

- Number of urban municipalities adopting acceptable flood hazard zoning bylaws

GOAL #2

Healthy watersheds and aquifers

OBJECTIVE 1 - *Source waters and watersheds are protected*

Performance Measures:

- Number of completed watershed and aquifer plans
- Water Quality Index (WQI) ratings for watersheds within the Province

OBJECTIVE 2 - *Public is aware of the importance of healthy watersheds*

Performance Measures:

- Under development

2004-05 Financial Overview

In managing and protecting the quality and quantity of Saskatchewan's water supplies the Authority receives a portion of its revenue from the Government of Saskatchewan's General Revenue Fund. In 2004-05, Saskatchewan Environment will provide the Authority with $6.118 million for the following purposes:

	(in thousands of dollars)
Operations	$ 395
Water control	4,012
Water quality	1,711

A breakdown of the Authority's 2004-05 revenues and expenditures by major area is provided below.

REVENUE	*(in thousands of dollars)*
Government of Saskatchewan	
– General Revenue Fund	$ 6,118
– Fish & Wildlife Development Fund	876
Water revenue	11,089
Contract revenue	1,300
Other	1,576
Total	$ 20,959

EXPENDITURES	*(in thousands of dollars)*
Operations	$ 6,865
Water management	5,303
Grants to clients	1,489
Water management infrastructure	147
Stewardship	4,034
Interest	46
Depreciation – infrastructure	6,190
Total	$ 24,074
Surplus (deficit) for the year	$ (3,115)

For the 2004-05 fiscal year, the Government of Saskatchewan will be adopting the Public Sector Accounting Board's standards relating to capital assets. The new standards represent a major change in how governments account for capital assets. The Authority is following Government's lead and will also be adopting the new standards.

In previous years, the Authority expensed the cost of all capital assets when they were acquired. Under the new standards, the full cost to build a dam, for example, is capitalized as an asset because it has long lasting service potential to the public. Over time, as the dam is used, the Authority records a depreciation expense on its statement of revenue and expenditures.

The Authority's 2004-05 budget surplus (deficit) is impacted by the adoption of the new standards. Based on budgeted new capital expenditures of $3.075 million and estimated depreciation of $6.19 million, the net impact on the budgeted surplus (deficit) is an increased expense of $3.115 million. Therefore, the entire budgeted deficit is attributable to the impact of depreciation required by the changes in the standards for accounting for capital.

Trends and Issues

Water management policies and programs are developed in response to a variety of internal and external pressures.

INVOLVEMENT OF ABORIGINAL PEOPLES

The Province has a constitutional duty to consult with aboriginal peoples on activities that would infringe on Aboriginal or Treaty rights, a duty that has continued to evolve since the Supreme Court of Canada decision *R.* v. *Sparrow* (1990). The Authority is developing a public involvement policy which will guide the Authority in proactively seeking public involvement, building stronger relationships with First Nations and Métis, while also ensuring the Crown's special obligations to First Nations and Métis people are met.

SOURCE WATER PROTECTION

Justice Laing's report on the inquiry into issues affecting North Battleford's water, recommended that Saskatchewan Environment create a unit "with a mandate and jurisdiction to protect watershed and groundwater sources of drinking water." The Watershed Authority has this mandate and has initiated watershed and aquifer planning in seven areas. Through its stewardship programs, the Authority works with landowners in various ways to protect source water. Monitoring the health of the watersheds is an essential component of source water

protection. The Authority works with stewardship groups to monitor local watersheds and is developing a model for state of watershed reporting.

WETLANDS AND DRAINAGE

The Province has long supported drainage and flood control to increase the agricultural land base and minimize flood losses. The Authority continues to administer programs that provide assistance to maintain existing works. By the late 1980s it was estimated that Saskatchewan had lost 40 per cent of its wetland areas. Although drainage is regulated by the Province, significant unauthorized drainage occurs. Drainage can create problems for downstream landowners. The Authority investigates complaints from affected landowners. This requires a significant amount of staff time.

WATER MANAGEMENT

The Authority is the provincial agency responsible for regulating the use of surface and groundwater. This responsibility requires the Authority to accommodate a number of pressures – growing demands for water within the Province, pressures from jurisdictions upstream and down with their own growing demands, and uncertainty about supplies with potential changes in climate. The Authority has an enforcement role related to the unauthorized use of water, unlicensed works, and failure to comply with licence conditions. Faced with a need for better operation forecasting and the diminishing role of federal agencies in primary data collection, the Authority has taken on a much larger provincial hydrometric data collection network, even as the cost of operating each station continues to rise. More recently has come the recognition that the Province also derives value from the instream use of water for the maintenance of aquatic ecosystems. The Authority considers instream flow needs in its allocation of water and the operation of control structures, but without a formalized process for assessing those needs. Once there is a better understanding of the significance of instream flow needs, the amount of water available for allocation to consumptive uses could, in some watersheds, be limited and operating rules for structures could change.

INFRASTRUCTURE MANAGEMENT

The Authority owns, operates and maintains the Province's water management infrastructure including such major structures as the Gardiner and Qu'Appelle dams on the South Saskatchewan River, and the Rafferty and Alameda dams in the Souris River basin. These works represent a significant responsibility for the Authority, which must ensure they are both safe and effective. A significant portion of the Authority's budget is spent on maintenance and rehabilitation. In operating the works, the Authority takes care to ensure due consideration is given, not only to project objectives, but also to public safety, environmental priorities, competing public water uses and, in the case of high consequence structures, emergency preparedness planning.

CLIMATE CHANGE

There is broad consensus that the global temperature is rising and, although the implications for Saskatchewan are not yet clear, it is thought that the Province will have warmer winters and more extremes of temperature and precipitation. Water supplies are likely to be affected, with reduced summer flow, an increase in frequency and magnitude of flooding and drought, higher water temperatures and increased evaporation, and changes to groundwater recharge and discharge. Water demand by all segments of society is likely to grow. With greater variability comes less predictability and the very real possibility of less water. Implications include less energy production and lower limits on the water-based development that can be sustained as well as dramatic impacts on natural wetland areas.

AGRICULTURE

The federal-provincial Agricultural Policy Framework, an initiative designed, among other objectives, to reduce the impact of agriculture on the environment, provides an opportunity for the Authority to address environmental issues on farms with environmental farm planning and activities aimed at source water protection.

Agricultural developments such as cropping patterns and farm management practices will influence the direction of change for issues of soil quality, water use, biodiversity, greenhouse gas emissions and water quality.

ECONOMIC DEVELOPMENT AND WATER

The Province's rural population has been in steady decline for decades, dropping over the past 70 years from over 560,000 to less than 150,000. The number of farming operations has declined by almost 50 per cent over the past 40 years. The Government has identified rural revitalization as a priority, with initiatives to provide stimulation in a number of sectors, such as intensive livestock operations, oil and gas, and irrigation. These, and initiatives for economic development in the north, will place increasing pressure on the Province's water resources. The Authority assists new initiatives to locate a suitable water supply.

Goals, Objectives, Actions and Measures

This section provides the detailed 2004-05 performance plan for the Authority that supports advancement towards our vision of "Excellence in watershed management promoting safe, sustainable water supplies in healthy ecosystems". Under each goal a number of objectives have been established that support progress towards the broader goal statement. For each objective, a set of key actions, the means for making progress toward the objectives, has been identified which the Authority is committed to completing in 2004-05. Performance measures have been established for some objectives, with others under development, to gauge progress towards meeting the objective.

GOAL #1

Safe and sustainable water supply

OBJECTIVE 1 - *Water management infrastructure is safe and meets operational requirements*

The Watershed Authority owns, operates and maintains 45 major dams and 130 kilometres of conveyance channels for the Province. These works are an essential part of the Province's water management infrastructure. They control the flow of water to improve water quality, ensure adequate supply, reduce the risk of flood damage, enhance recreational opportunities and maintain aquatic habitat. Four of the dams, Gardiner, Qu'Appelle, Rafferty and Alameda, would have major consequences from downstream flooding, including property damage and risk of loss of life, if they failed. Like all capital assets, these works depreciate and require a continuous investment in maintenance and rehabilitation to ensure their safety and ability to operate to meet the Province's needs.

Key Actions for 2004-05

- Proceed with capital expenditures to ensure that water infrastructure is safe
  - ~ Complete rehabilitation work at Alameda, Avonlea and Cowan Lake dams and Emma Lake Diversion Canal.
  - ~ Proceed with the rehabilitation of the Lac La Ronge Control Structure and river bank stabilization and pump station upgrading at the Pike Lake Project.
  - ~ Complete final project designs for spillway rehabilitations at Hugonard and Theodore dams. Prepare preliminary design for the Upper Qu'Appelle Conveyance Project and a final design for Year 1 construction of that project.
- Manage the risk associated with water management infrastructure
  - ~ Ensure the continuing safety of the Authority's dams by initiating a dam break analysis of Alameda Dam, and completing comprehensive inspections of Bradwell East, Bradwell West, Cowan Lake, Northminster, Scott and Theodore dams.

- Maintain and operate the Authority's water management infrastructure by, among other actions, undertaking technical maintenance activities including measuring and analyzing instrumentation and survey data at Gardiner, Qu'Appelle, Rafferty, Alameda, Buffalo Pound, Avonlea, Theodore and Northminster dams, and performing physical maintenance activities at Gardiner, Qu'Appelle, Rafferty and Alameda dams as identified in the Authority's five-year Operations and Maintenance Plans. Project maintenance at other infrastructure to be undertaken on an as-needed basis.
- Ensure that the Authority's water management infrastructure can satisfy operational objectives by inspecting all infrastructure at least once during the year and by assessing the conveyance capacity of 20 per cent of the Authority's constructed channels (Last Mountain Lake to Pasqua Lake in 2004-05).
- Initiate work on a policy regarding ecosystem needs for a new and rehabilitated infrastructure.

What are we measuring?	**Where are we starting from?**
Risk ratio for the Province's water management infrastructure	0.147 *[2003-04]*

This measure is a ratio of the aggregated assessed risk of all the Authority's water management infrastructure at a given time, compared to the maximum possible risk generated by this infrastructure. Risk, defined as the likelihood of a failure multiplied by the consequences of a failure, has been assessed in relative values. Numerically this may be expressed as:

$$\text{Risk Ratio} = \frac{\text{Assessed Current Risk}}{\text{Total Possible Risk}}$$

This measure gauges the Authority's progress in upgrading its infrastructure to acceptable standards and quantifies the overall risk of the water management infrastructure. A lower ratio indicates safer infrastructure, with a ratio of 0.0 indicating no current assessed risk and 1.0 being the hypothetical maximum risk. As the Authority owns the structures, its influence on this measure is high, but upgrades to reduce risk require significant investments and will therefore be made over a number of years.

What are we measuring?	**Where are we starting from?**
Number of dams requiring significant upgrades to meet dam safety standards	27 *[2003-04]*

The Authority, like all provincial governments and major utilities across Canada has adopted the Dam Safety Guidelines prepared by the Canada Dam Association. This measure quantifies the number of provincial dams which require upgrades to meet the Canada Dam Association Dam

Safety Standards. As the Authority owns the structures, its influence on this measure is high, but upgrades require significant investments and will therefore be made over a number of years.

OBJECTIVE 2 - *Water supply is reliable*

The Province has a long history of allocating supplies for various uses that remove water from the source water bodies, such as for domestic, municipal, industrial, and irrigation purposes. Our objective, in controlling water use, is to ensure needs are met and a new user does not take water already depended on by another person or business. Instream use of water for the maintenance of aquatic ecosystems is also required.

Operation of provincial projects, such as the Authority's major dams and SaskPower's hydro operations, requires careful planning to achieve project objectives and minimize negative impacts on other uses of the resource. Reliable and extensive data are essential to the forecasting required for operation planning.

There is a consensus among most climatologists that human related increases in greenhouse gases are causing the earth's temperature to rise, leading to effects on other meteorological elements such as rain and snow, wind and the frequency of severe storms. These changes will impact on the Province's water supply.

Key Actions for 2004-05

- Ensure that water uses are known and efficiently allocated
  - ~ Develop and implement a water use monitoring program to ensure actual municipal, industrial and agricultural water use is known and is within the allocated amount.
  - ~ As part of the provision of information on water supplies to promote socioeconomic development, the Authority will meet 90 per cent of groundwater information enquiries on a same day basis.
  - ~ Represent provincial water management interests to meet First Nations, interprovincial and international obligations through: participating in negotiations with Qu'Appelle Valley First Nations to resolve flood claims; attending Prairie Provinces Water Board and Mackenzie Basin Board meetings; initiate discussions toward establishment of a bilateral agreement between Alberta and Saskatchewan under the Master Agreement on the Mackenzie River Basin; participate in the release of the first State of the Aquatic Ecosystem Report for the Mackenzie Basin; attend meetings, help arrange for new appointments and assist with implementation of new mandate of the International Souris River Board, and; participate in the International Joint Commission review of the apportionment of the St. Mary and Milk rivers.
  - ~ Direct the operations at all Authority dams and water flows at SaskPower's hydroelectric generating facilities and advise Prairie Farm Rehabilitation Administration on the operations of the Qu'Appelle River structures.

- Address knowledge and information requirements to maintain a reliable water supply
  - ~ Lead efforts to improve public knowledge of problems presented by abandoned wells and the need for proper decommissioning of these wells. Opportunities for the development of a provincial or federal/provincial well decommissioning program will be pursued.
  - ~ Develop a water use conservation strategy in consultation with other departments and interest groups including Saskatchewan Association of Rural Municipalities, Saskatchewan Urban Municipalities Association, Saskatchewan Irrigation Projects Association and industry representatives.
  - ~ Identify locations where water quality data and hydrometric station data are collected, re-evaluate their importance, assess the potential for integration, draft a report on integration and begin training staff to collect both hydrometric and water quality data.
  - ~ Provide information on water supplies to encourage large water use industries to locate where reliable water supplies are available.
  - ~ To further delineate and quantify groundwater resources in agricultural Saskatchewan, the Piapot groundwater resource assessment pilot project will be completed by fiscal year end. In addition, one new groundwater resource assessment will be initiated and completed while support to ongoing groundwater mapping activities will be maintained.
  - ~ Complete an internal draft assessment of groundwater data collection activities and procedures and conduct a needs analysis.

What are we measuring?

Under development

Where are we starting from?

Under development

OBJECTIVE 3 *- Flood damage is minimized*

Floods can impose significant costs in property damage and loss of production. The Authority works to minimize flood damage through the use of water management infrastructure and by predicting areas at risk of flooding to guide other departments, municipalities and business in reducing flood risk. Dams, dykes and ditches can reduce the size and duration of floods while proper management of development in flood plains avoids the large costs in property damage which could otherwise occur in a major flood.

Key Actions for 2004-05

- Complete the necessary hydraulic analysis and draft the Alameda emergency preparedness plan and update the Gardiner Dam emergency preparedness plan.
- Update the flood plain mapping for Regina, Moose Jaw and Estevan.
- Improve public access to flood forecasts and water level information by improving the Authority's website (www.swa.ca). The Authority will enhance flood forecasting capabilities.

- Revise flood risk mapping along the South Saskatchewan River, downstream of the Gardiner Dam.
- Provide technical and financial support to Conservation and Development Area Authorities and Watershed Associations to maintain/rehabilitate locally owned existing water control infrastructure.
- Conduct a review of the Authority's water control program.

What are we measuring?	**Where are we starting from?**
Number of urban municipalities adopting acceptable flood hazard zoning bylaws	16 *[2002-03, latest data available]*

This measure quantifies the number of urban municipalities adopting acceptable flood hazard zoning bylaws. Flood damages are largely, though not exclusively, associated with urban development in flood prone areas, therefore one of the most effective ways of minimizing flood damage costs is by preventing inappropriate development in these areas. Given this decision is made by each municipality, the results for this measure will largely be out of the control of the Authority, however, the Authority can influence this measure by providing information on flood risk.

GOAL #2

Healthy watersheds and aquifers

OBJECTIVE 1 *- Source waters and watersheds are protected*

The people of Saskatchewan depend on both surface and groundwater sources for their basic human needs and to generate economic activity. Proper siting of a water supply and aggressively protecting it from potential contaminants are keys to providing a safe water supply.

It is recognized that a multiple barrier approach from protecting the source to the tap is the most effective way to protecting drinking water quality. Controls to provide multi- barrier protection to source waters are being developed and put into place.

Key Actions for 2004-05

- Watershed planning provides the basis for decision-making
  - Initiate source water protection plans through the formation of local advisory and technical committees in the Lower Souris, Upper Assiniboine, Moose Jaw, Upper Qu'Appelle, South Saskatchewan and North Saskatchewan watersheds, and the Yorkton aquifer. The assembly of information and the commencement of locally based dialogue around the protection of source waters will be among the key efforts.

- ~ Develop and implement comprehensive management plans for Authority lands at Rafferty and Alameda, along the Carrot River and along the Qu'Appelle River (including Fairy Hill Marsh). Monitor and evaluate implemented plans at Quill Lakes and Chaplin Lake.

- Conduct watershed reporting

  - ~ Undertake, in co-operation with Saskatchewan Environment, the preparation, publication and distribution of a State of the Watershed Reporting Framework. This Framework will form the template for future reports. It will outline proposed watershed scale, timing of reporting, priority of watershed reporting, indicators, and format.

  - ~ Prepare a Geographic Information Systems Strategic Plan to prioritize options for improving database quality.

  - ~ Provide surface water data and analysis for the annual State of Drinking Water Quality Report.

- Ensure that watersheds are protected

  - ~ Re-evaluate and re-design the Prairie Water Care program and the Rural Water Quality Advisory Program to provide monitoring and assessment support for the seven priority watershed planning processes and priority operational projects (structures, fish passages).

  - ~ Deliver the North American Waterfowl Management program and activities.

  - ~ Develop and implement plans with landowners and partners to reduce erosion channels in highly cultivated landscapes. Target areas include the east central portion of Saskatchewan and the Wood River and Carrot River basins.

  - ~ Assist landowners in partnership with other agencies to develop plans to move or improve cattle wintering sites at 10 locations to reduce risk of contaminated run off into streams and lakes.

  - ~ Secure voluntary stewardship agreements with 68 landowners to conserve 5,000 hectares of native prairie, hold five workshops to publicize demonstration projects and communicate management information to producers, and deliver presentations regarding these activities at three conferences.

  - ~ Assist landowners in partnership with other agencies to develop grazing and land-use programs to improve riparian and wetland health/condition at 50 sites.

  - ~ Develop/design prairie and upland management plans with landowners in partnership with other agencies to prevent soil erosion and conserve soil moisture at 50 sites.

  - ~ Develop four targeted proposals to the Agricultural Policy Framework National Stewardship Program to assist in restoring the health of the watersheds.

  - ~ Conduct a review of the Authority's watershed enhancement program designed to address the preservation of wetlands, riparian areas and critical habitat.

  - ~ Survey and assess weirs, dams, levees, and low level crossing at five sites to determine their impedance to fish migration and their importance for fish spawning in watersheds selected for planning and at other priority structures. Where required, work with owners to design and install works such as fish passages to reduce impacts and re-establish passage.

What are we measuring?

Number of completed watershed and aquifer plans

Where are we starting from?

Zero plans completed, seven plans are under way

[2003-04]

The objective is to complete watershed and aquifer plans to guide activities for source water protection. This measure is based on the potential number of watersheds and aquifers – currently estimated at 30.

A precursor to the protection of a watershed is the development of a watershed plan. Watershed planning allows Saskatchewan residents the opportunity to commit to and participate in changes that will ensure adequate and quality drinking water. The completed plans will set priorities and identify emerging issues. The Authority leads the planning process, but community representatives develop the plans. The Authority thus shares influence on this measure with the communities in the watersheds.

What are we measuring?

Water Quality Index (WQI) ratings for watersheds within the Province

Where are we starting from?

Qu'Appelle – fair to good[1]
South Saskatchewan – good to excellent
North Saskatchewan – good to excellent
Saskatchewan River Basin – good to excellent

[2003-04]

[1] *There are two locations in the Qu'Appelle Basin where the quality would be considered marginal for protection of aquatic life. The basin ranges from fair to excellent for livestock watering and irrigation purposes.*

The Water Quality Index (WQI) is an overall measure of the quality of water for specific uses such as the protection of aquatic life, livestock watering, recreation, etc. The Index is a composite of different chemicals and organisms in the water at safe levels for a particular use. It is a good measure of the quality of surface or groundwater.

The Government has little direct control over the results of this broad measure of water quality. Samples are collected by industries and municipalities in accordance with their permits, as well as by government staff. The levels of chemicals and organisms in the samples are compared with the WQI levels for safety and health of the people.

The assessment of all watersheds using the WQI is a long-term project. Saskatchewan Environment will be using the data collected from its primary monitoring stations on the major watersheds. The WQI rating in the Qu'Appelle River Watershed is expected to improve over the long-term as a result of watershed planning efforts led by the Authority.

OBJECTIVE 2 *- Public is aware of the importance of healthy watersheds*

Many actions to protect water can only be accomplished at the initiative of or in partnership with the citizens of the Province. Success of the Authority's programs is therefore dependant on the public's understanding of the importance and benefits of source water protection.

Key Actions for 2004-05

- Implement a public education strategy in support of the Safe Drinking Water Strategy in co-operation with other departments through preparing feature articles for newspapers and partner and trade magazines, and providing information on the Authority's website (www.swa.ca).
- Deliver information in support of our programs and our partner programs by surveying residents of priority watersheds; publishing the Prairie Update newsletter; co-ordinating website design and content; preparing feature articles for weekly newspapers, partner and trade magazines, and participating in major tradeshows including Canadian Western Agribition, Farm Progress, Canadian Water Resources Association, Saskatchewan Urban Municipalities Association, Saskatchewan Association of Rural Municipalities and the major education conferences in the Province.
- Deliver education programs (Project WET, Project Wild, Climate Change, etc.) which are directly linked to the Saskatchewan curricula, by offering workshops to teachers in the Kindergarten to Grade12 system, and students in the Faculty of Education at the University of Regina and the University of Saskatchewan.
- Develop and implement a plan to track public opinion and public awareness of watershed issues, including public opinion polling and other tools as appropriate.

What are we measuring?	**Where are we starting from?**
Under development	Under development

Measures for this objective are currently under development, however, over the coming year the Authority will be working on developing measures that are designed to gauge public understanding of the issues affecting water.

Where to Obtain Additional Information

More information can be obtained by visiting the Authority's website at www.swa.ca, calling its head office in Moose Jaw at 306-694-3900 or contacting the water inquiry line toll free at 1-866-SASK-H2O (1-866-727-5420).

Copies of this performance plan are available at the Authority website, www.swa.ca.

Comments on the Authority's plan should be addressed to:

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